

INTERNATIONAL SEARCH REPORT

Int'l Application No

PCT/IB 03/50032

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 G11B7/00 G11B7/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, INSPEC, IBM-TDB

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 949 613 A (TEIJIN LTD) 13 October 1999 (1999-10-13) the whole document ---	1, 2, 4, 6-10
X	WO 00 63899 A (CHIBA KIYOSHI ; TOMIE TAKASHI (JP); TEIJIN LTD (JP)) 26 October 2000 (2000-10-26) abstract ---	1, 2, 4, 6-10
X	PATENT ABSTRACTS OF JAPAN vol. 016, no. 527 (P-1447), 29 October 1992 (1992-10-29) -& JP 04 195831 A (HITACHI LTD), 15 July 1992 (1992-07-15) abstract ---	1, 3, 5 -/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

25 March 2004

Date of mailing of the international search report

03/05/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Moje, A

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/50032

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2000 322740 A (RICOH CO LTD) 24 November 2000 (2000-11-24) -& US 6 548 137 B2 (ABE MICHIHARU ET AL) 15 April 2003 (2003-04-15) column 2, line 19 -column 5, line 33; figure 1 ---	1-10
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 268 (P-1224), 8 July 1991 (1991-07-08) -& JP 03 088144 A (ASAHI CHEM IND CO LTD), 12 April 1991 (1991-04-12) abstract -----	1-10

INTERNATIONAL SEARCH REPORT
Information on patent family members

Int'l Application No
PCT/IB 03/50032

Patent document cited in search report	Publication date		Patent family member(s)	Publication date
EP 0949613	A 13-10-1999	EP JP TW US	0949613 A2 11353708 A 445440 B 6251492 B1	13-10-1999 24-12-1999 11-07-2001 26-06-2001
WO 0063899	A 26-10-2000	AU CN EP WO JP TW	3839600 A 1347556 T 1171878 A1 0063899 A1 2002542563 T 472251 B	02-11-2000 01-05-2002 16-01-2002 26-10-2000 10-12-2002 11-01-2002
JP 04195831	A 15-07-1992		NONE	
JP 2000322740	A 24-11-2000	US US	2003124298 A1 2003031823 A1	03-07-2003 13-02-2003
JP 03088144	A 12-04-1991	JP	2781421 B2	30-07-1998